

FIG. 1

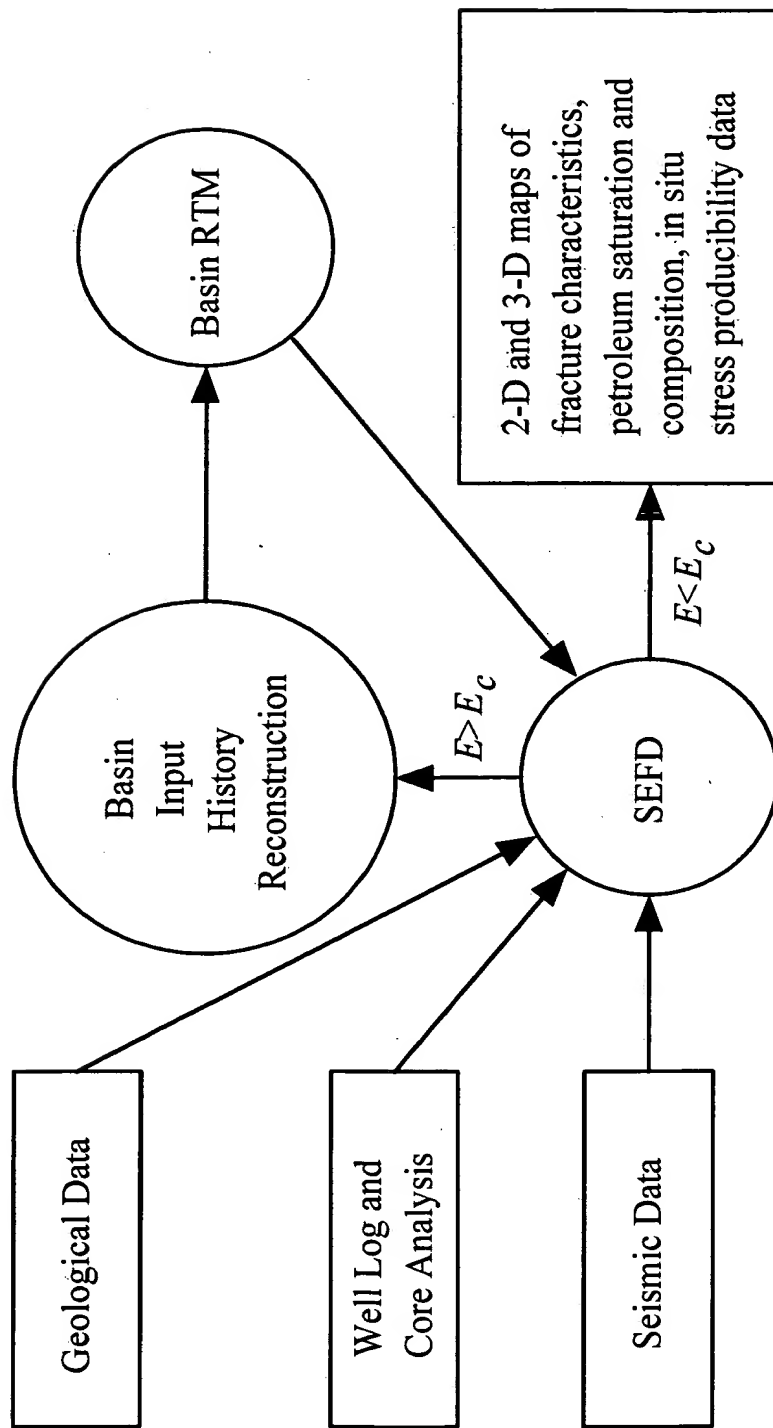


FIG. 2

System	Producing Lithology	Tectonics	Age (My)
Cretaceous (Austin Chalk)	Very fine-grained carbonate	Salt withdrawal, extensional	100
Devonian (New Albany Shale)	Siliciclastic, very fine- grained siliciclastics	Compression, faulting	360
Cretaceous (Mesaverde)	Fine-grained sandstones	Compression, thrusting	70
Silurian- Pennsylvanian (Anadarko Basin)	Variety	Deep subsidence and faulting	400-280
Ordovician (Permian Basin)	Vuggy and fractured carbonate (Ellenburger, etc.)	Uplift, wrenching	500

FIG. 3

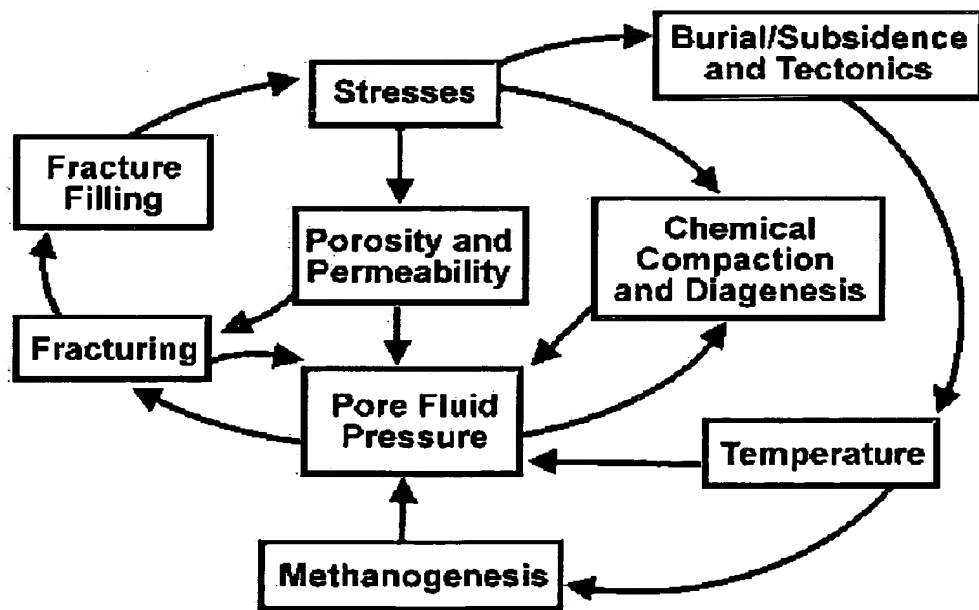


FIG. 4a

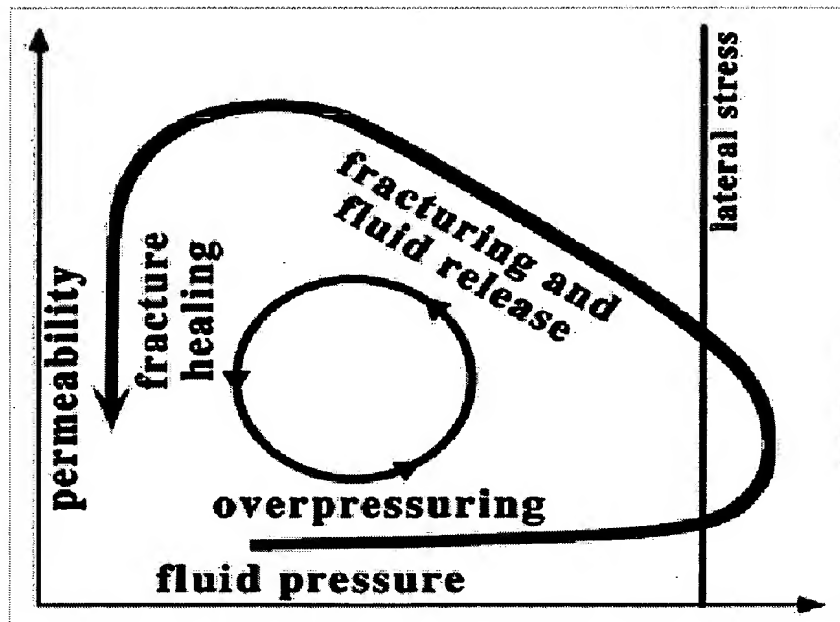
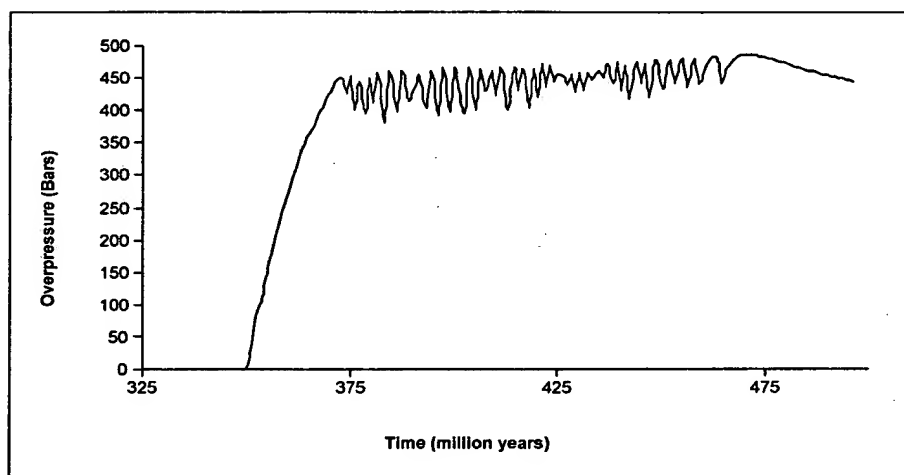
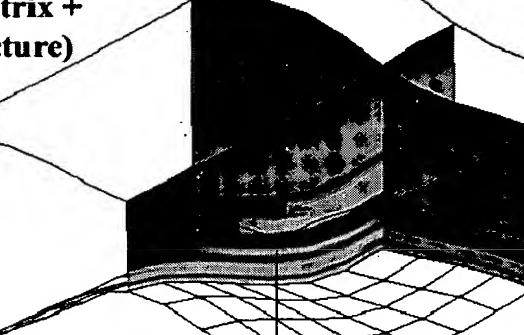


FIG. 4b



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**permeability
(matrix +
fracture)**

A 3D surface plot representing permeability (matrix + fracture). The surface is highly irregular and wavy, with a central peak and several smaller peaks and valleys. The base of the plot is a grid, and the surface is shaded to show its topography. The plot is contained within a 3D wireframe box.

log(base 10) darcy

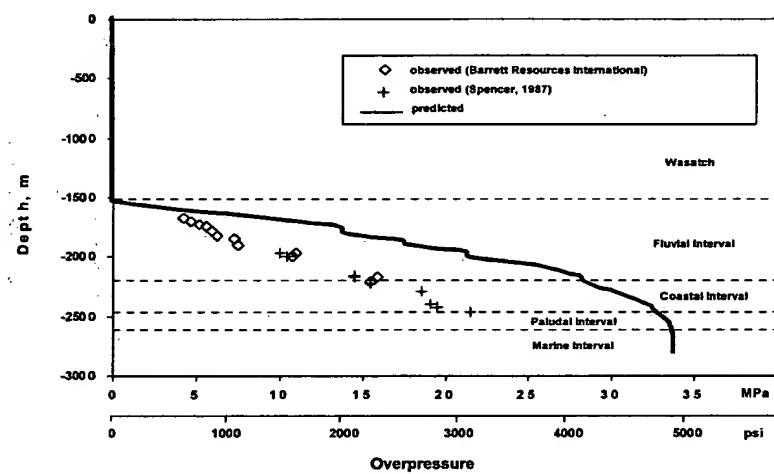
[illegible]

FIG. 6b

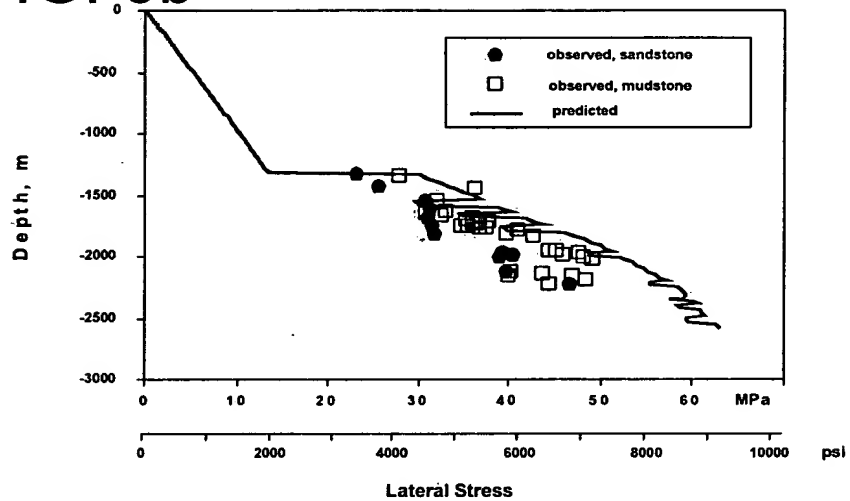


FIG. 6c

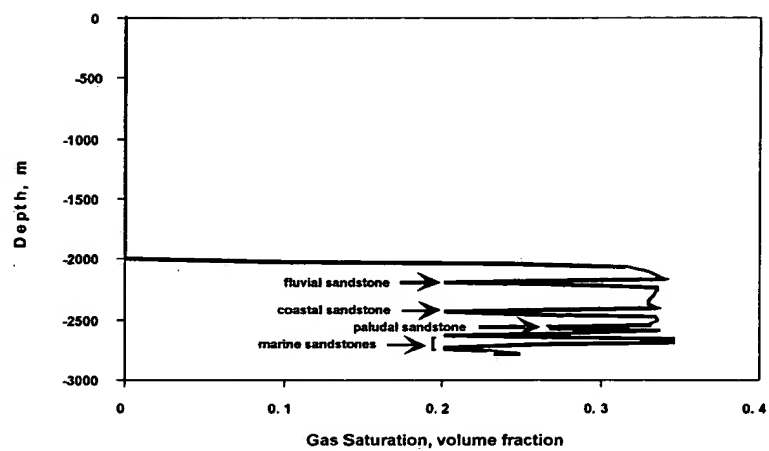
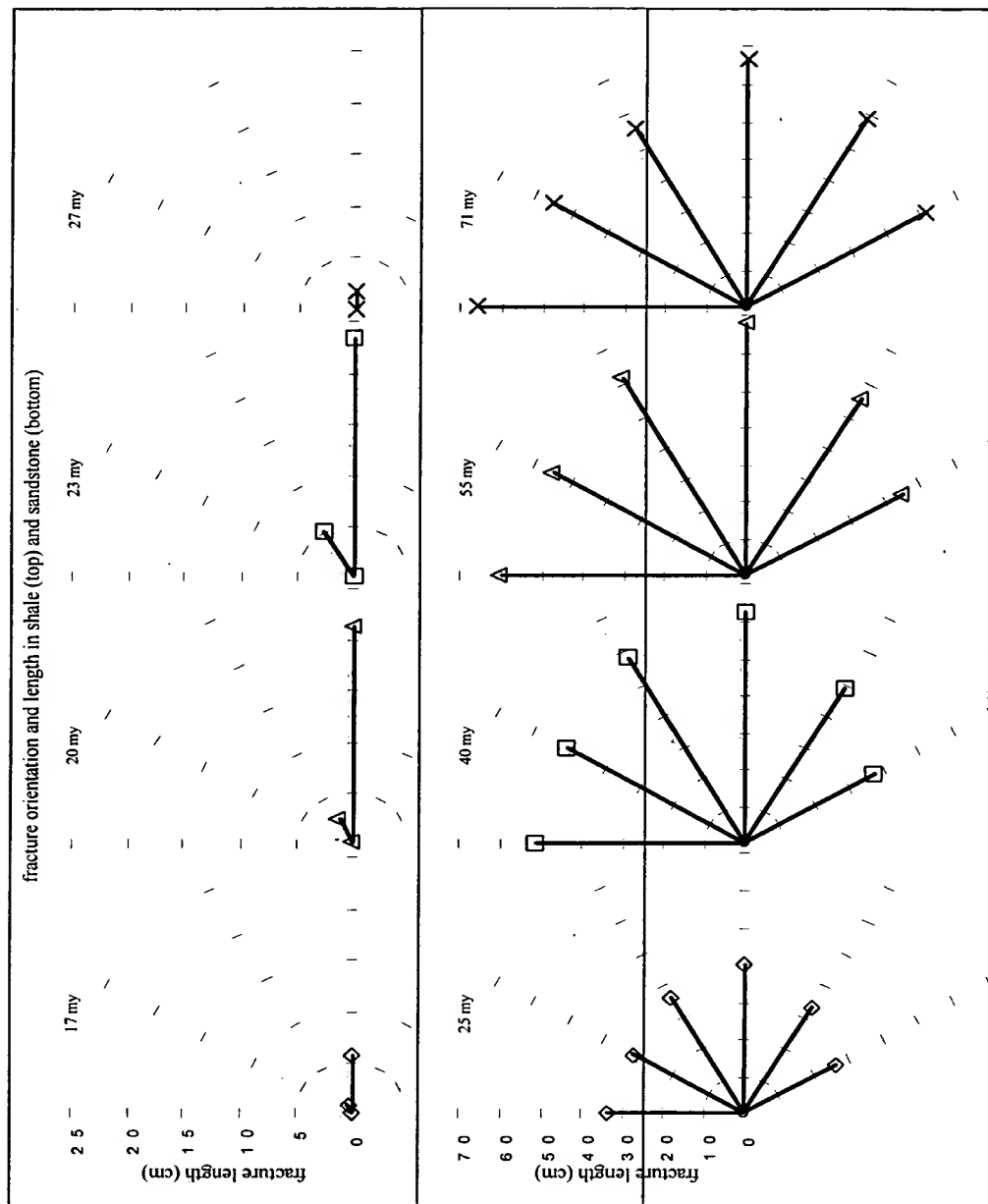


FIG. 7



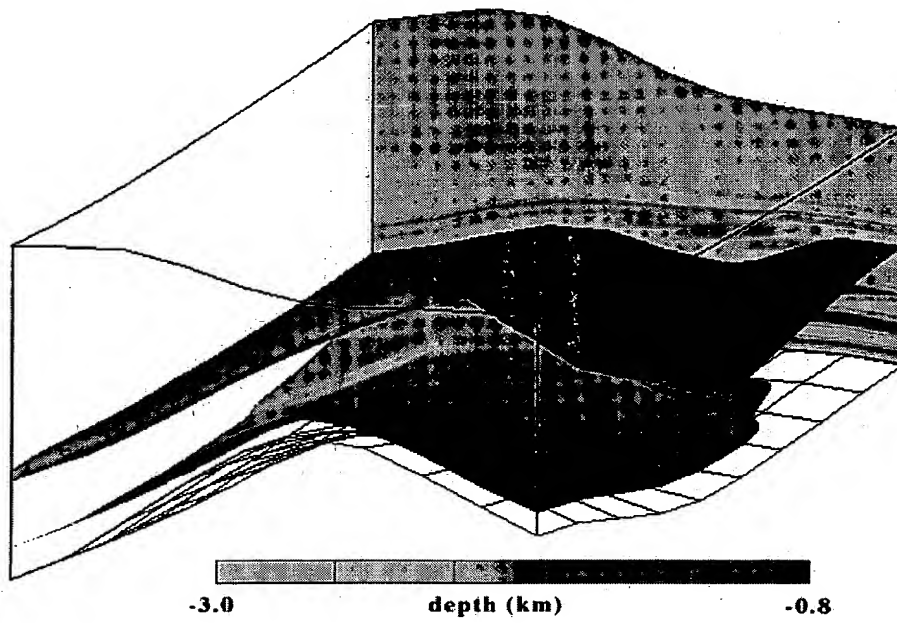
[illegible]

FIG. 8b

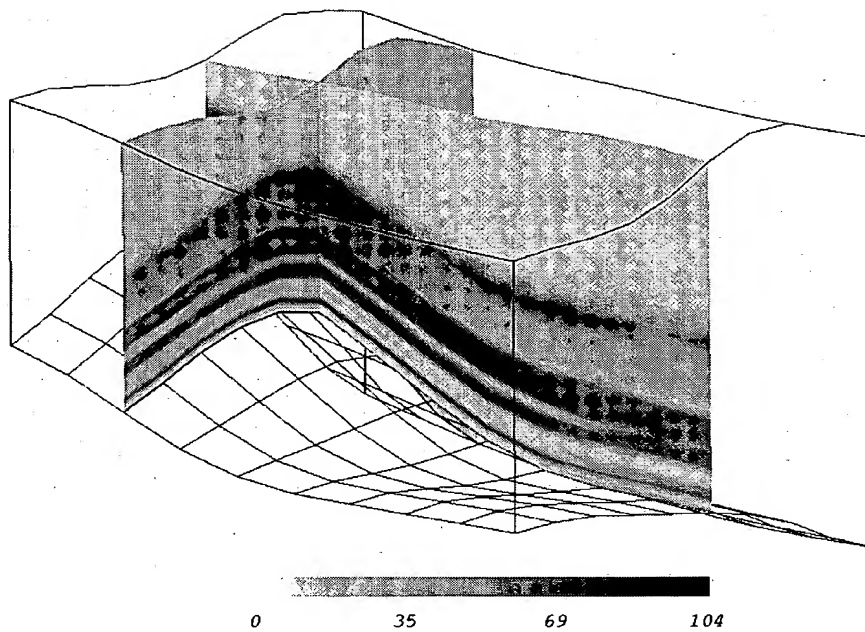


FIG. 9a

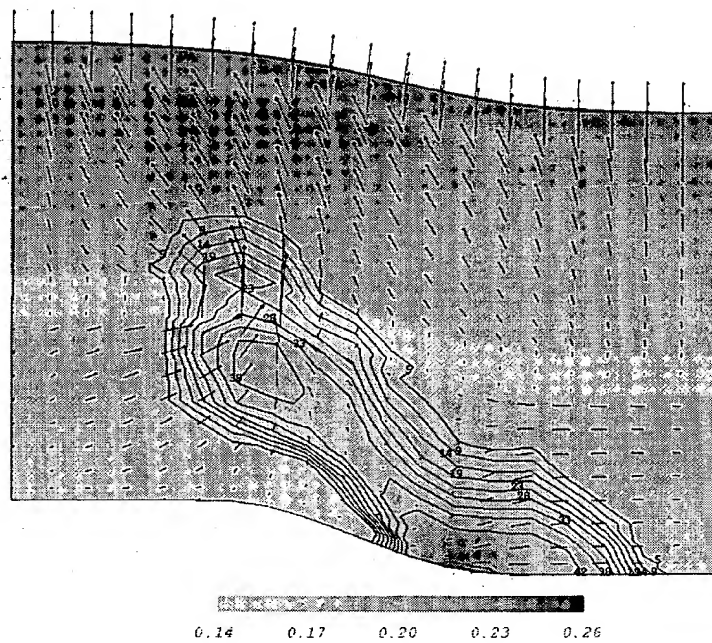


FIG. 9b

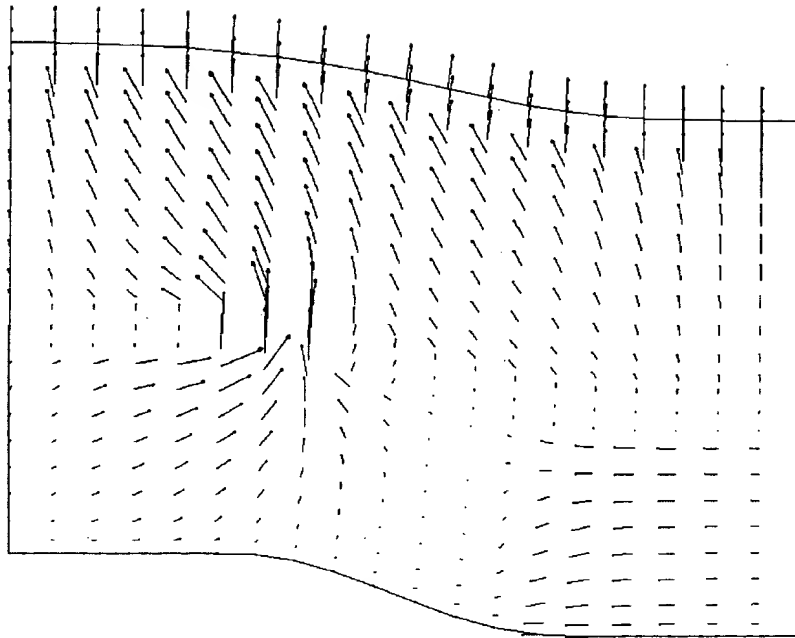
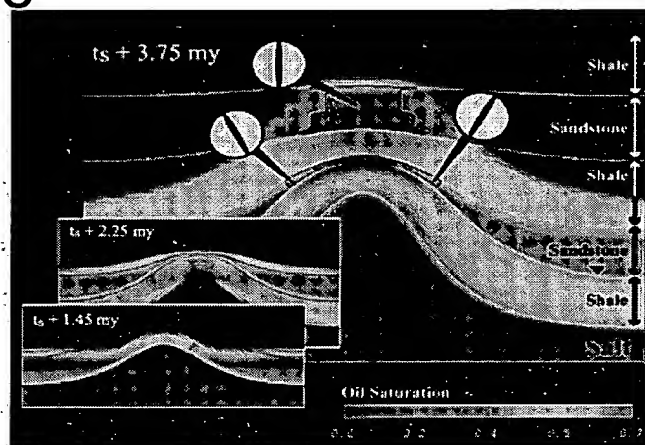


FIG. 10



1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100

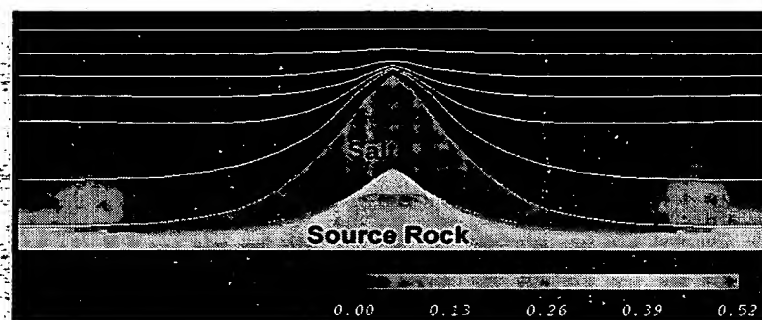


FIG. 12

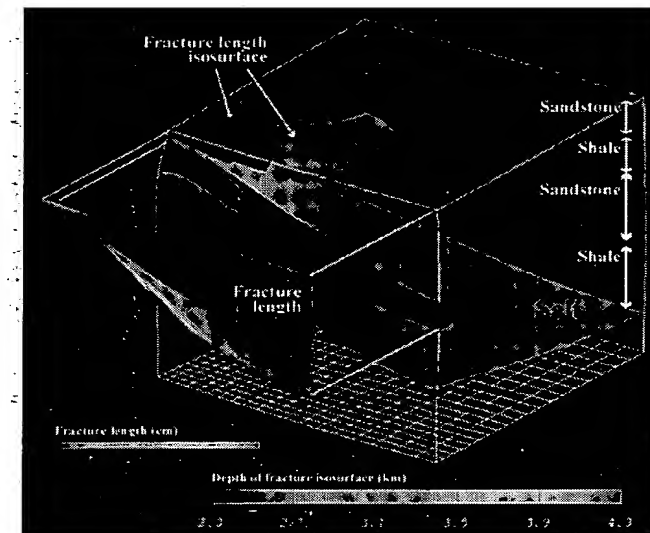


FIG. 13

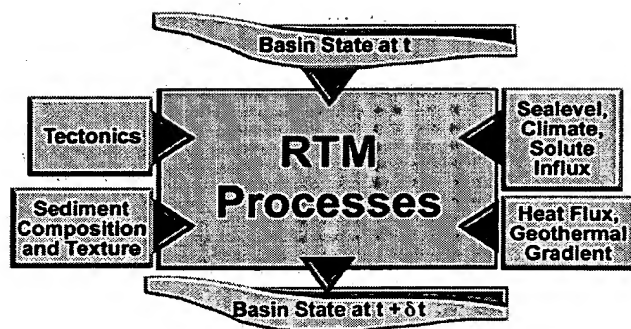


FIG. 14a

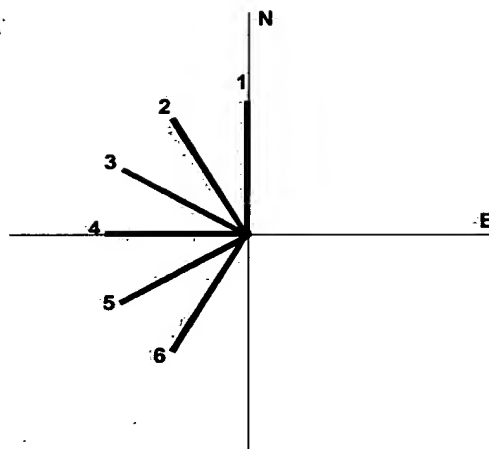


FIG. 14b

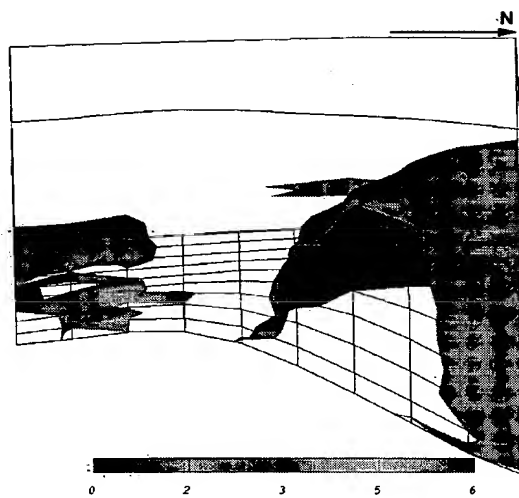


FIG. 15

Type of Data
Petroleum reserve assessment
Fracture analysis
Well log and seismic data
Tectonic and stress history
Thermal data and analysis
Stratigraphy
Data on organic content and thermal maturity
Fluid composition, pressure, and transport
Hydrothermal and magmatic fluids

FIG. 16

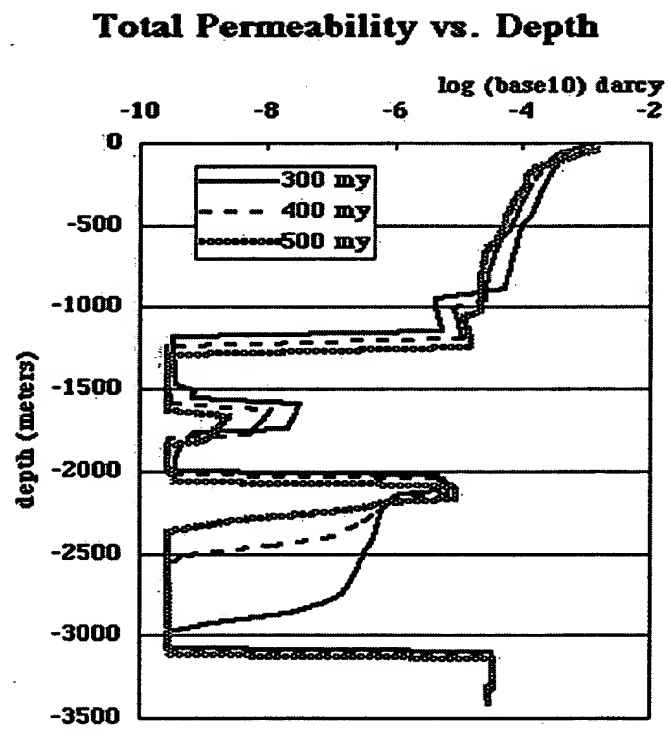
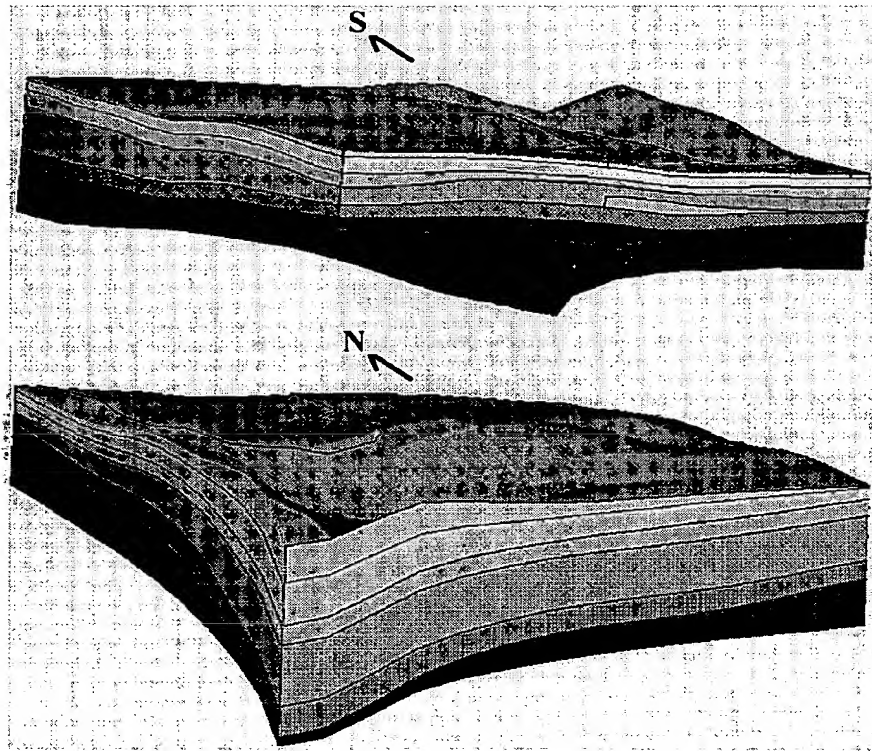


FIG. 17



00040250 000000

FIG. 18

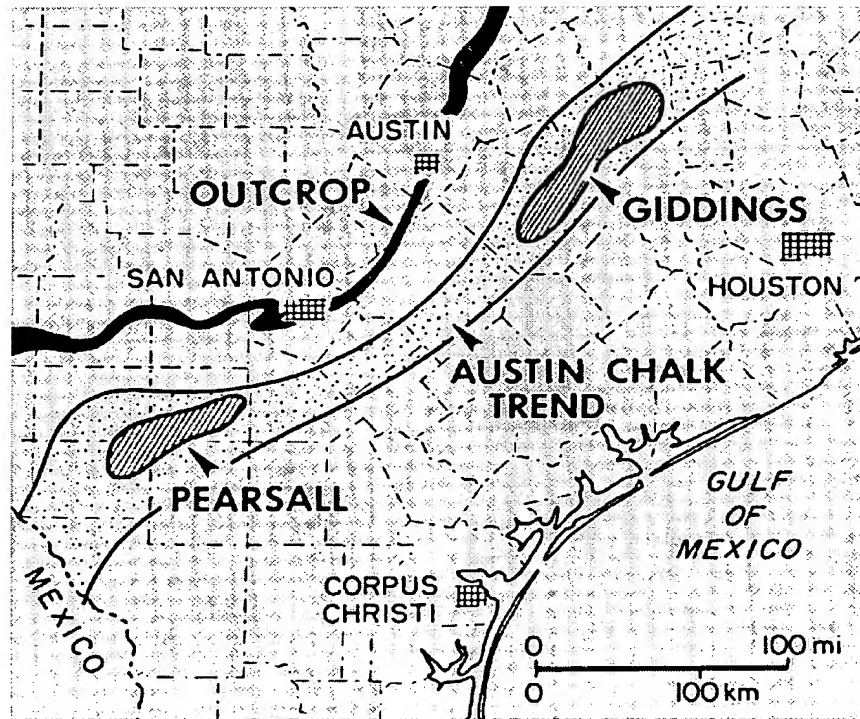
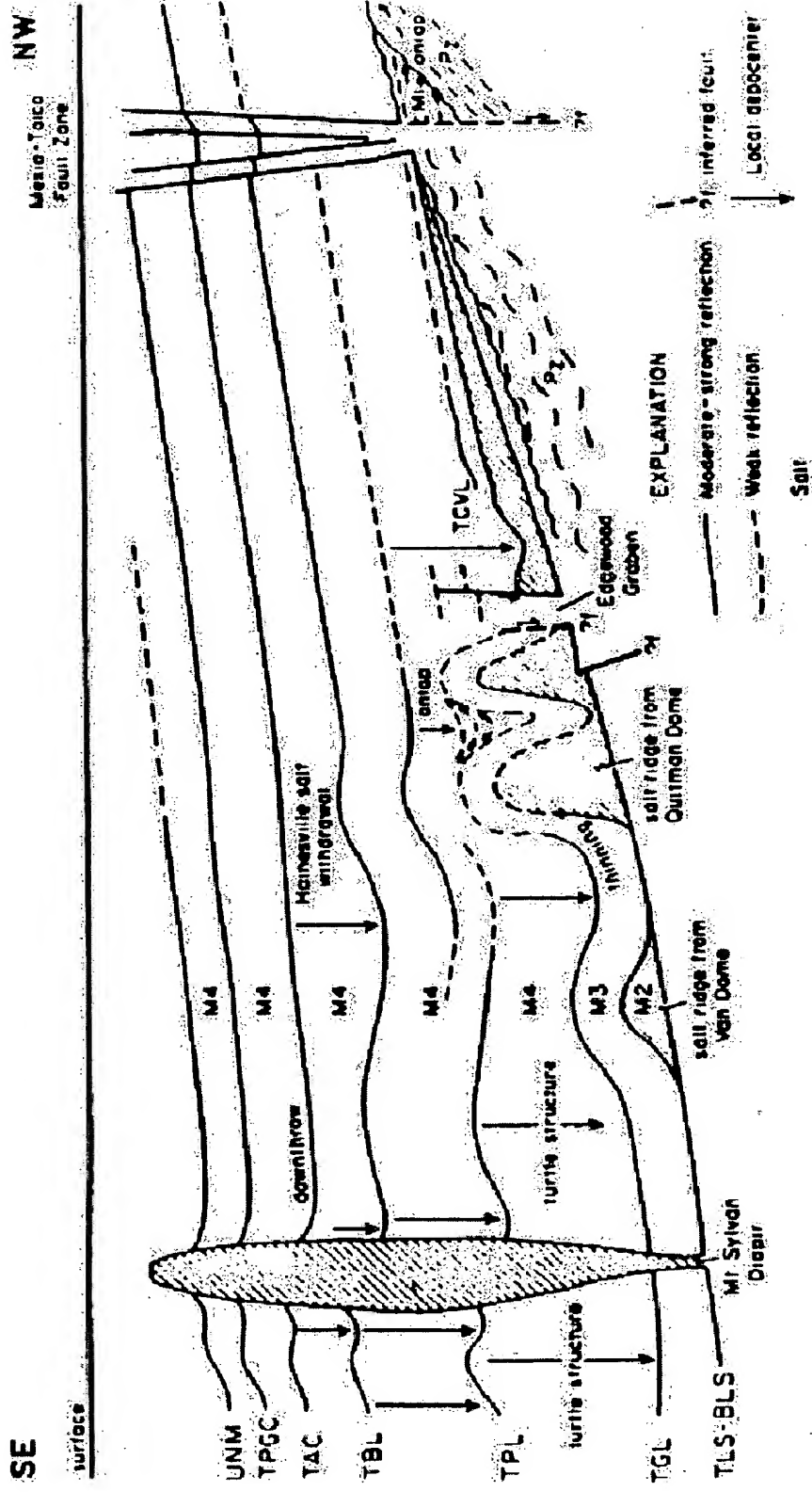


FIG. 20



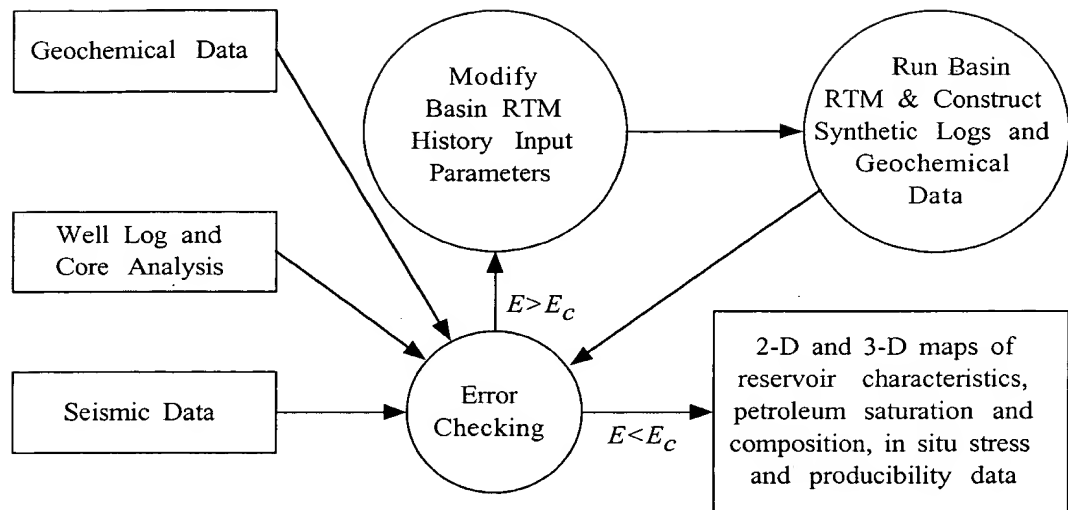


FIG. 21

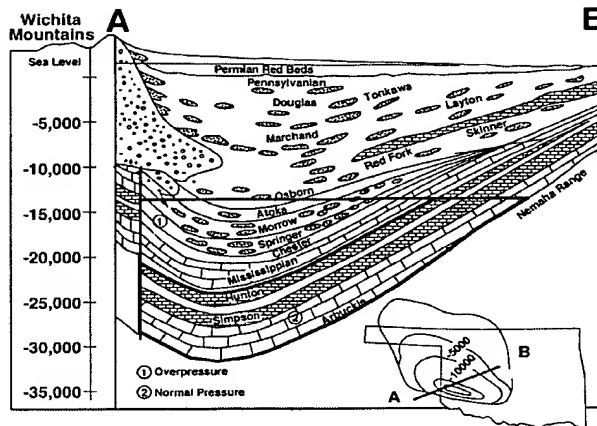


FIG. 22a

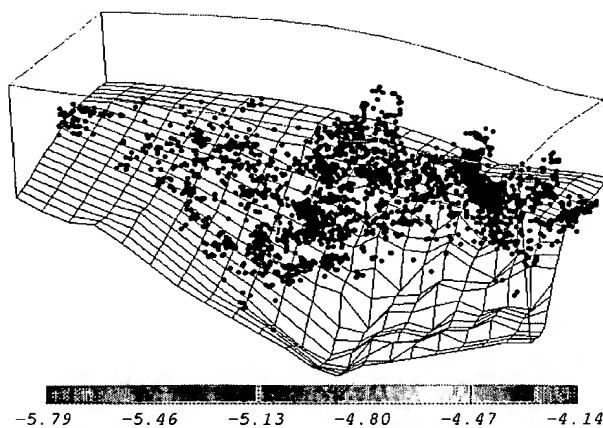
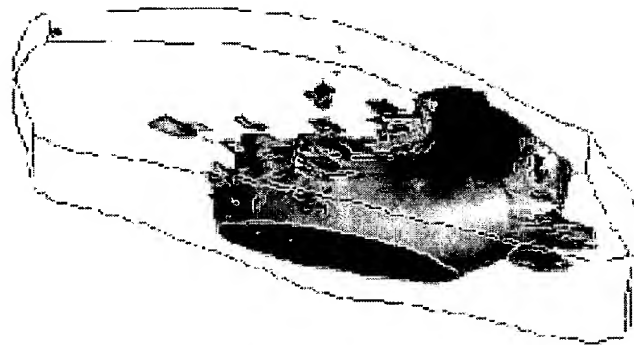


FIG. 22b

FIG. 22b



-8.6 -7.3 -6.0 -4.7 -3.1 -2.1

FIG. 22c



FIG. 22d

00049531 092704
000000 000000

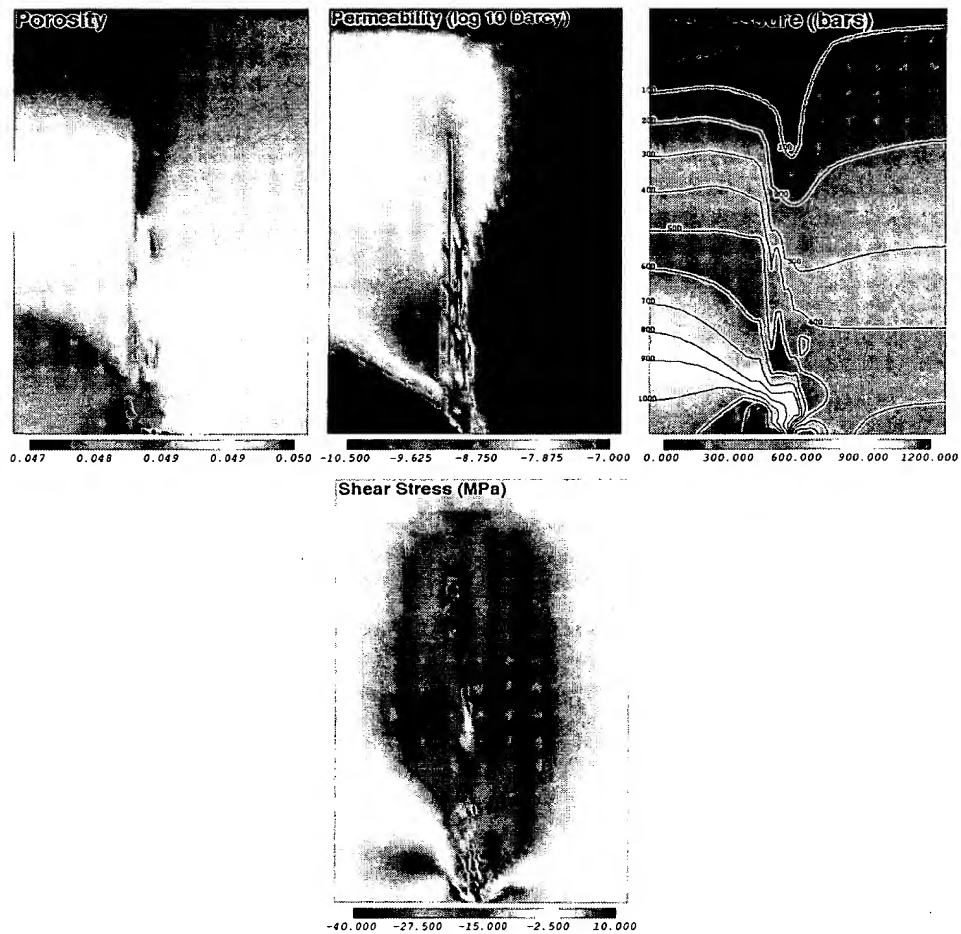


FIG. 23

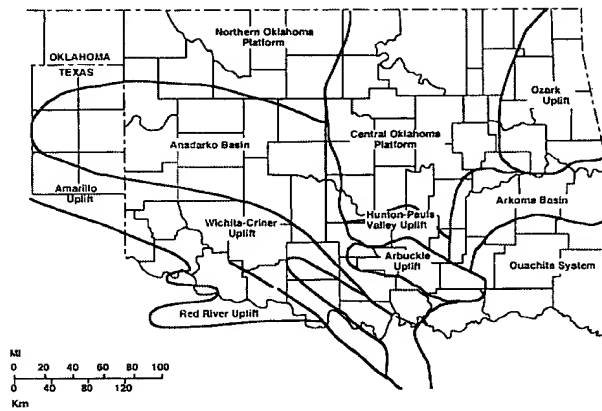


FIG. 24

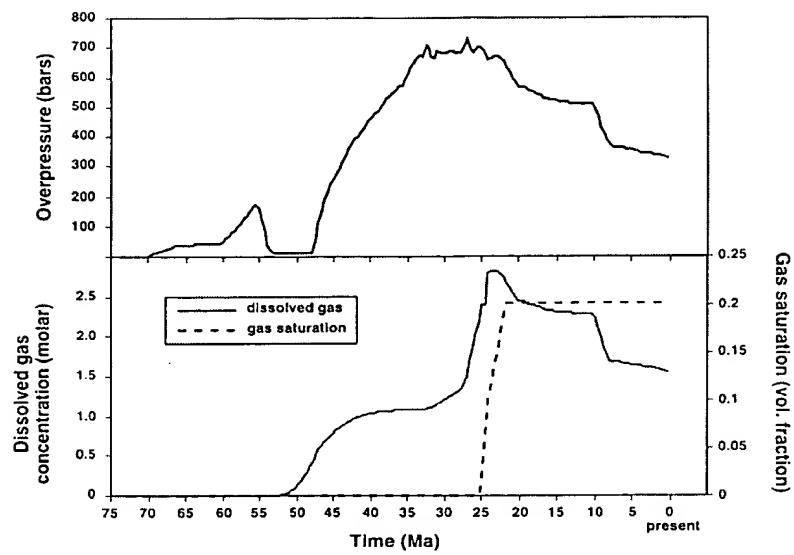


FIG. 25

Type of Log	Formulas	Experiments
Sonic	Bourbie et al. 1987; Tittman 1986	Bourbie et al. 1987
Density	Tittman 1986	Ahmadi and Coe 1997
Gamma	Tittman 1986	Ahmadi and Coe 1997
Resistivity	Revil et al. 1997; Tittman 1986	Penicol and Jing 1997; Donaldson et al. 1991
Permeability	Bastos et al. 1998; Tittman, 1986	Bastos et al. 1998
Neutron	Revil et al. 1997; Tittman 1986	
SP	Revil et al. 1997; Tittman 1986	

FIG. 26

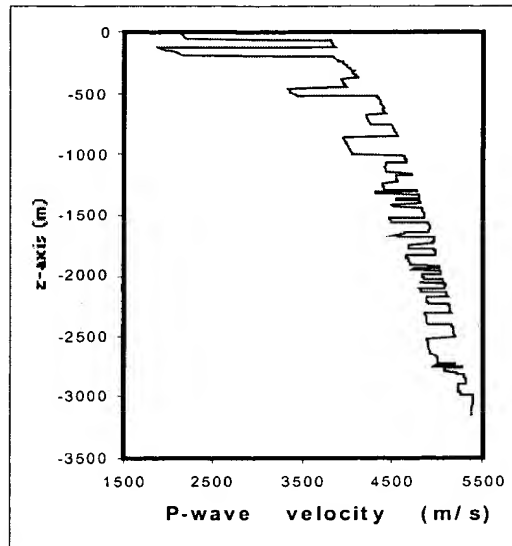


FIG. 27a

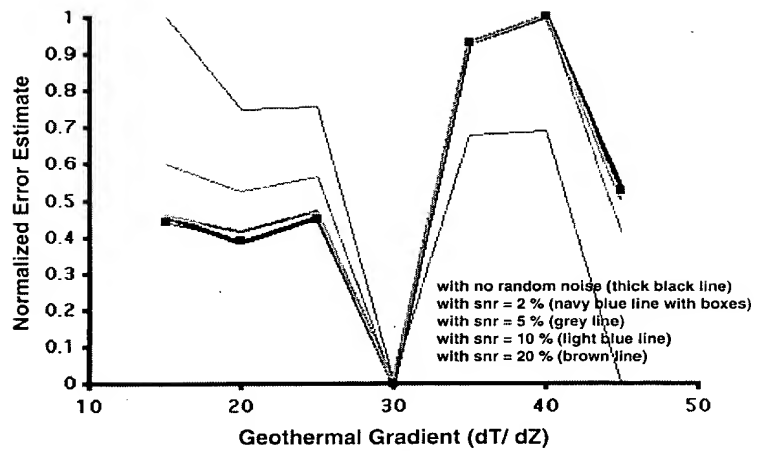


FIG. 27b

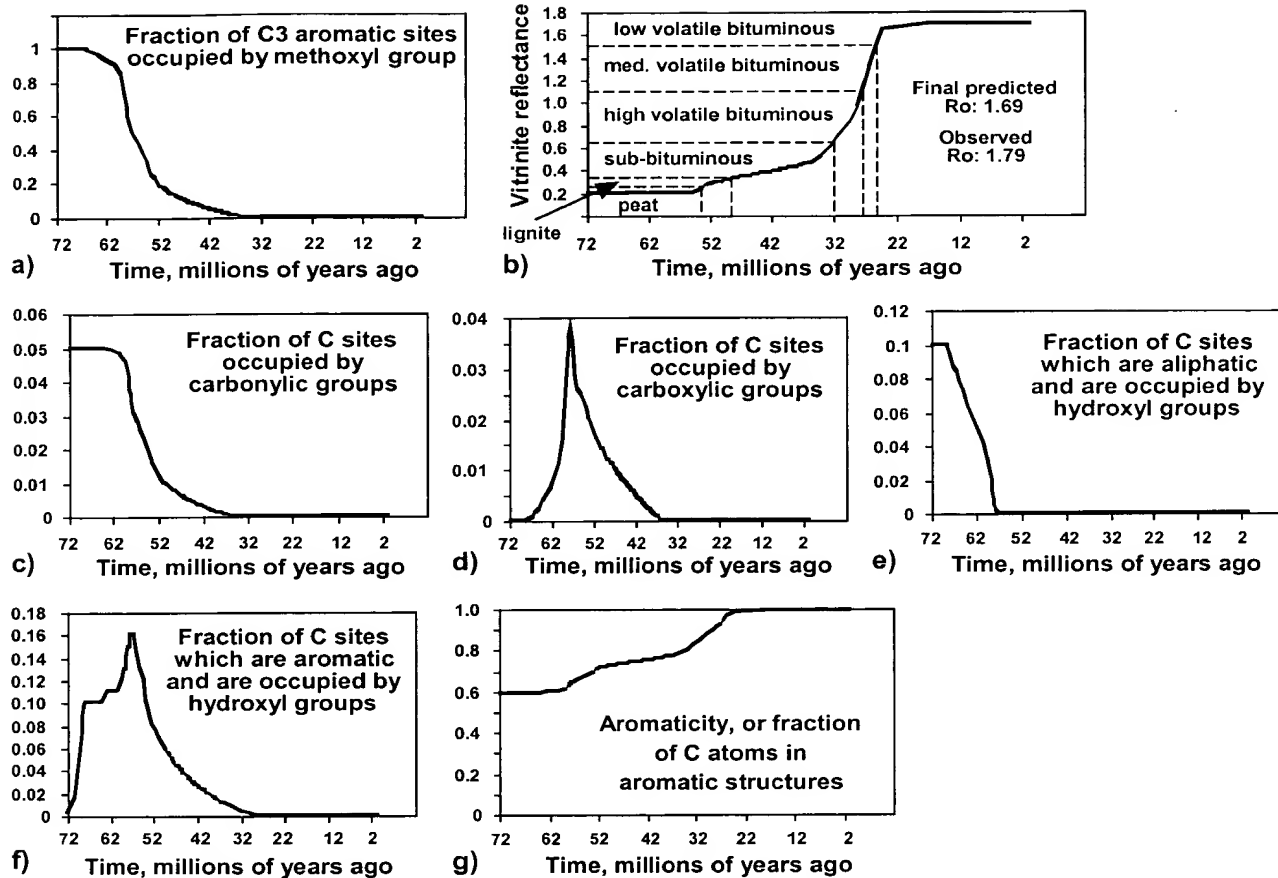


FIG. 28

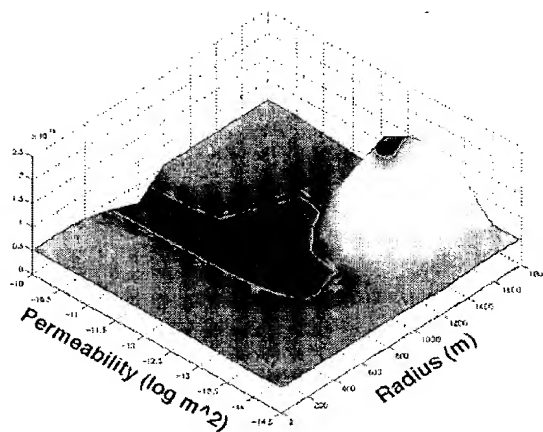


FIG. 29b

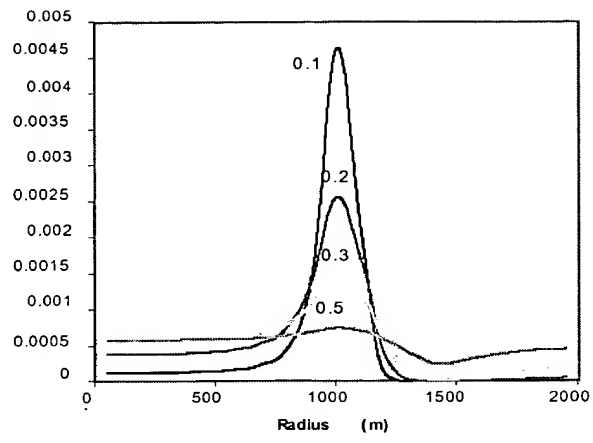


FIG. 29c

Stratigraphic Interval	Cores	Thin Sections
1. Missourian- Virgilian	20	122
2. Desmoinesian	46	502
3. Morrowan	51	655
4. Springerian	8	79
5. Hunton		
6. Woodford	7	57
7. Simpson		
8. Arbuckle		
Total	166	2096

FIG. 30a

Data Type	# of Analysis
Wire-line logs	3,000
Pressure Data	5,000
Capillary Pressure	15
Vitrinite Reflectance	72
Isotopic Analysis	52
Fluid Inclusion	267
Seismic Lines	2
Tectonic History (Time Depth Profiles)	12
Permeability	35
Fracture Analysis	166

FIG. 30b

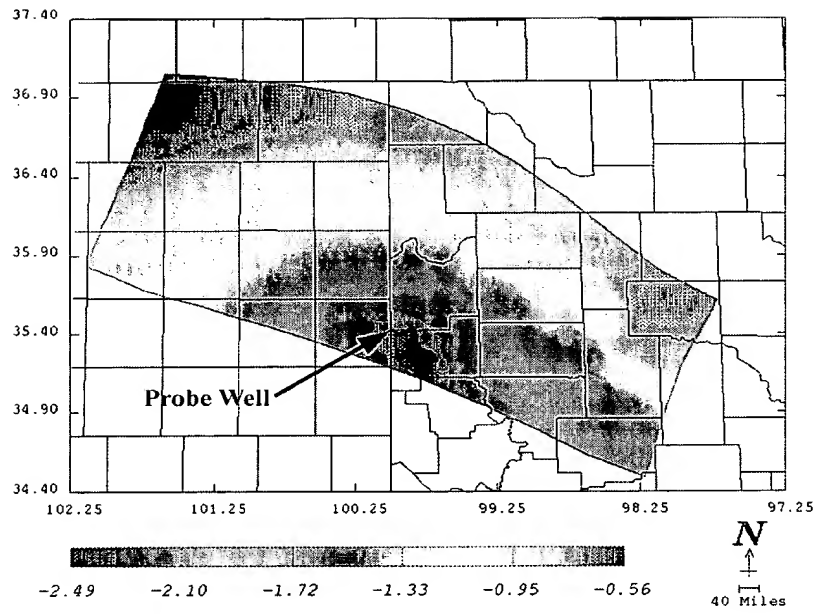


FIG. 31

Section 36 Crosswell Data - Velocity Change Due To CO₂, VGWU #94 to VGWU #81

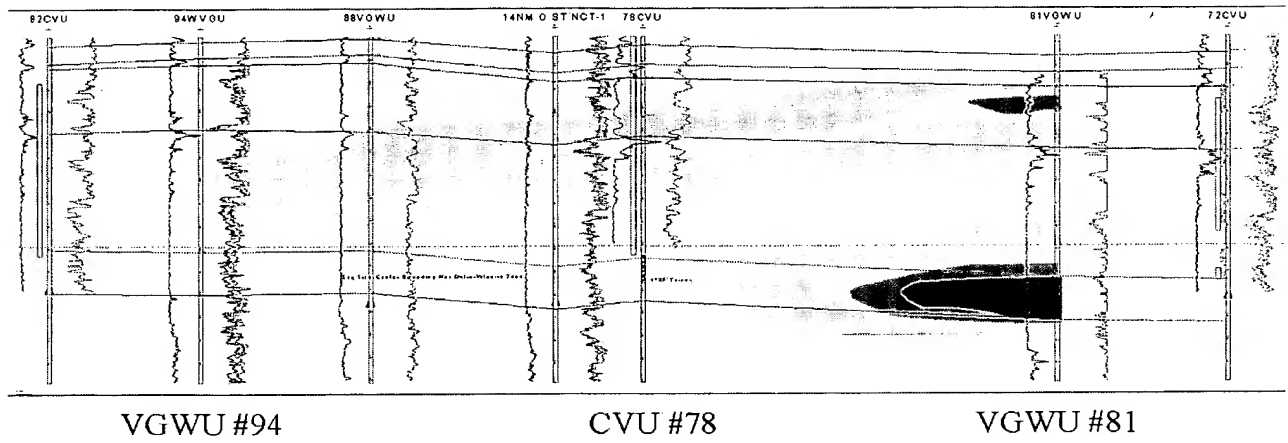


FIG. 32

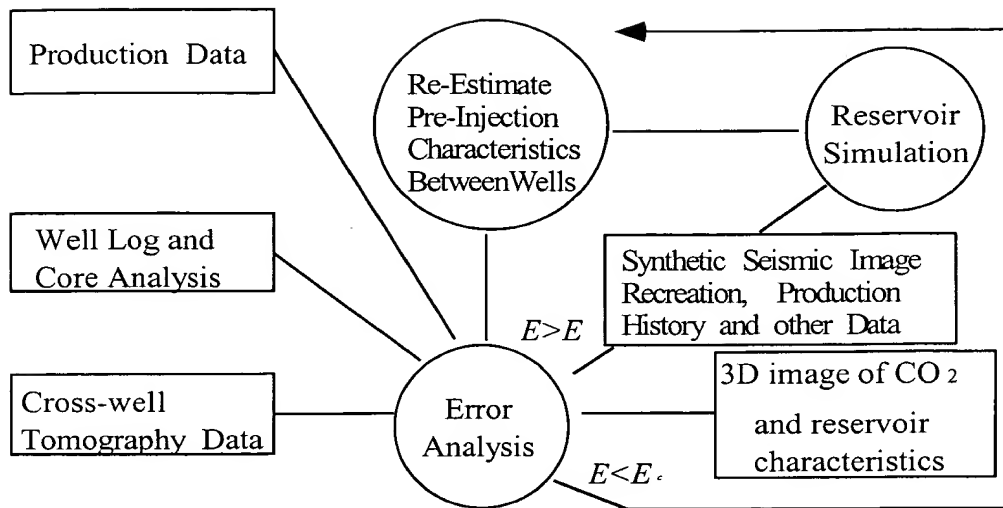


FIG. 34

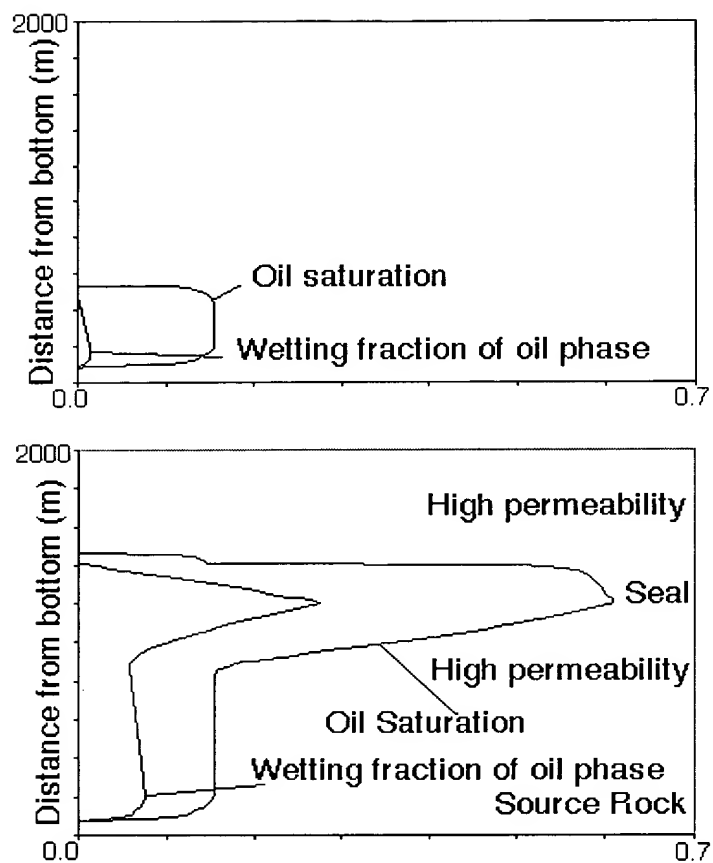


FIG. 35

Two-way travel time (seconds)

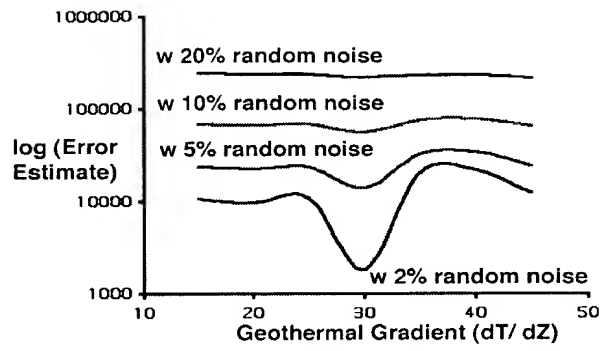


FIG. 37

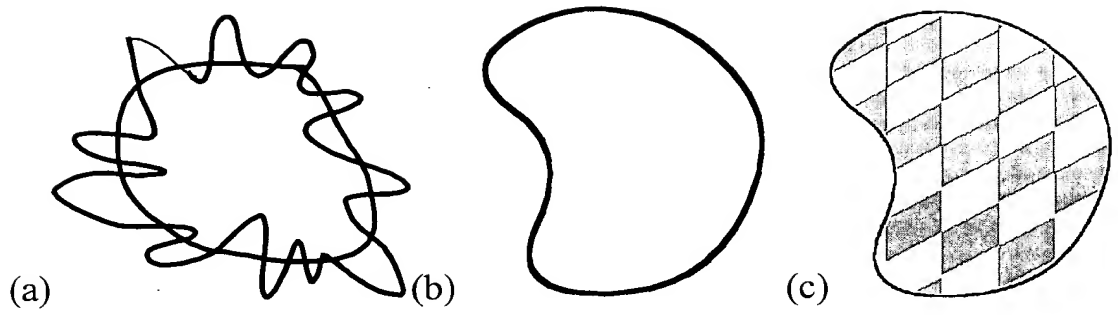
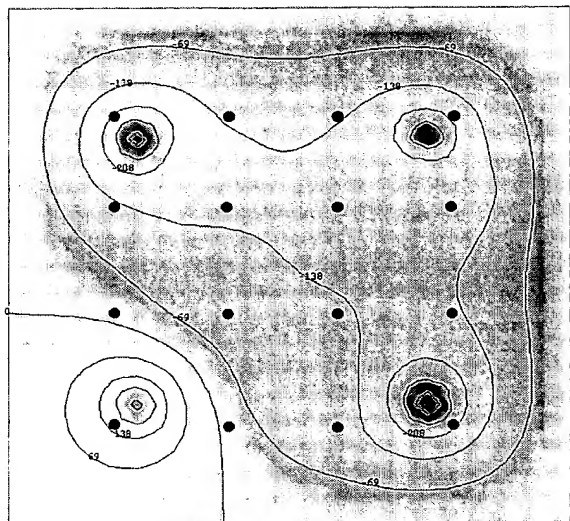
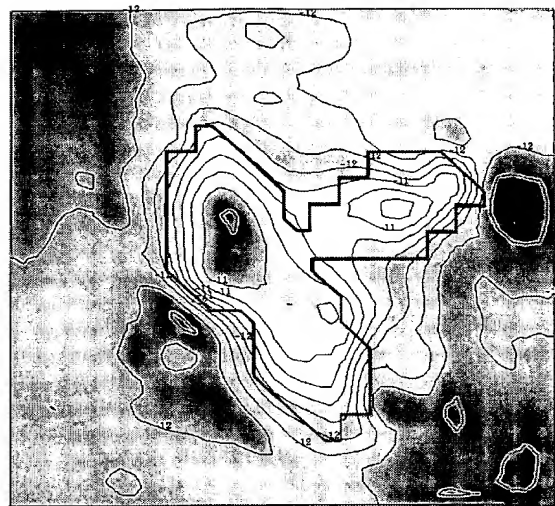


FIG. 38

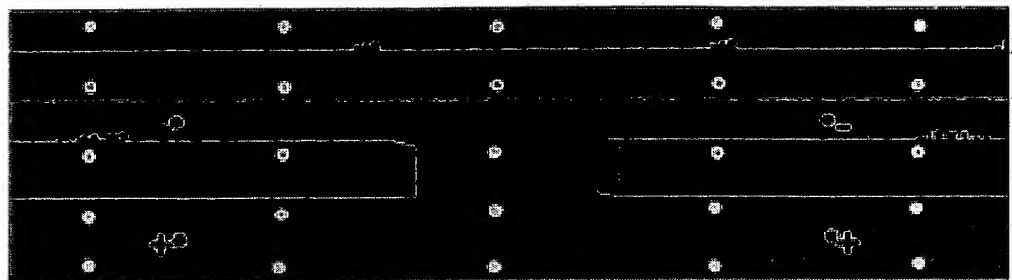


(a)



(b)

FIG. 39



-14.0 -13.5 -13.0 -12.5 -12.0

FIG. 40a

FIG. 40a

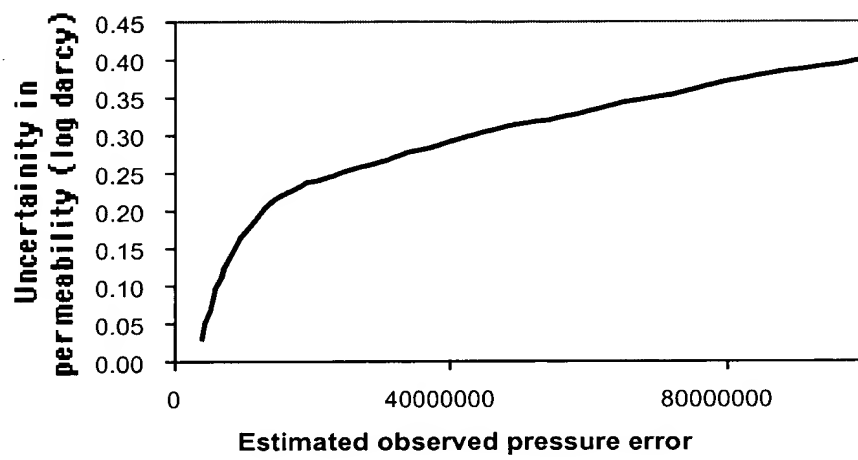


FIG. 40c

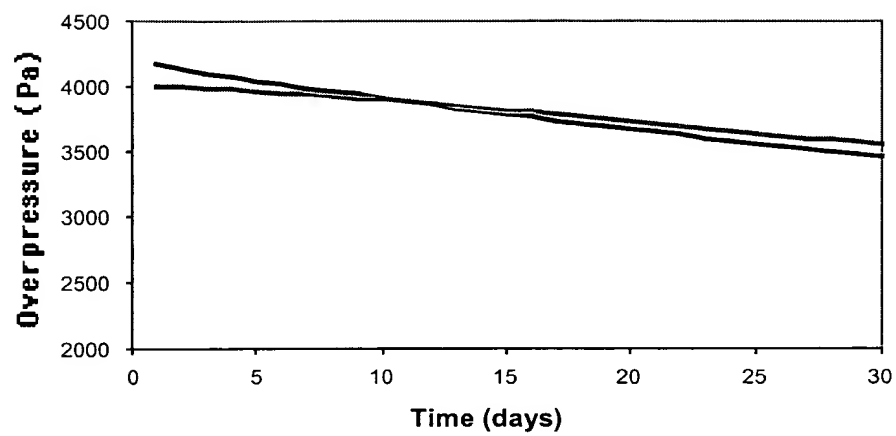


FIG. 41

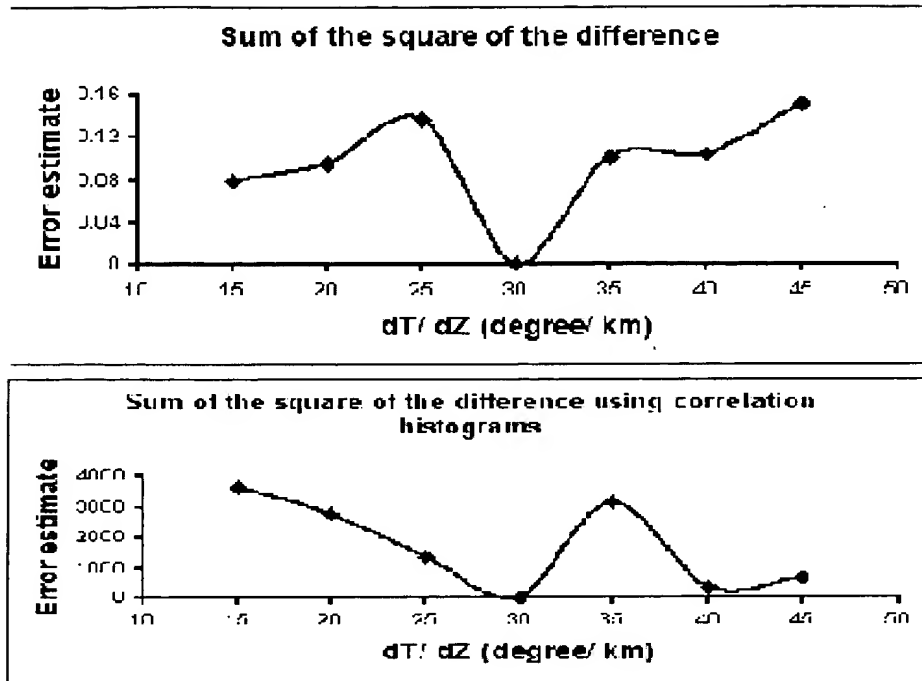


FIG. 43

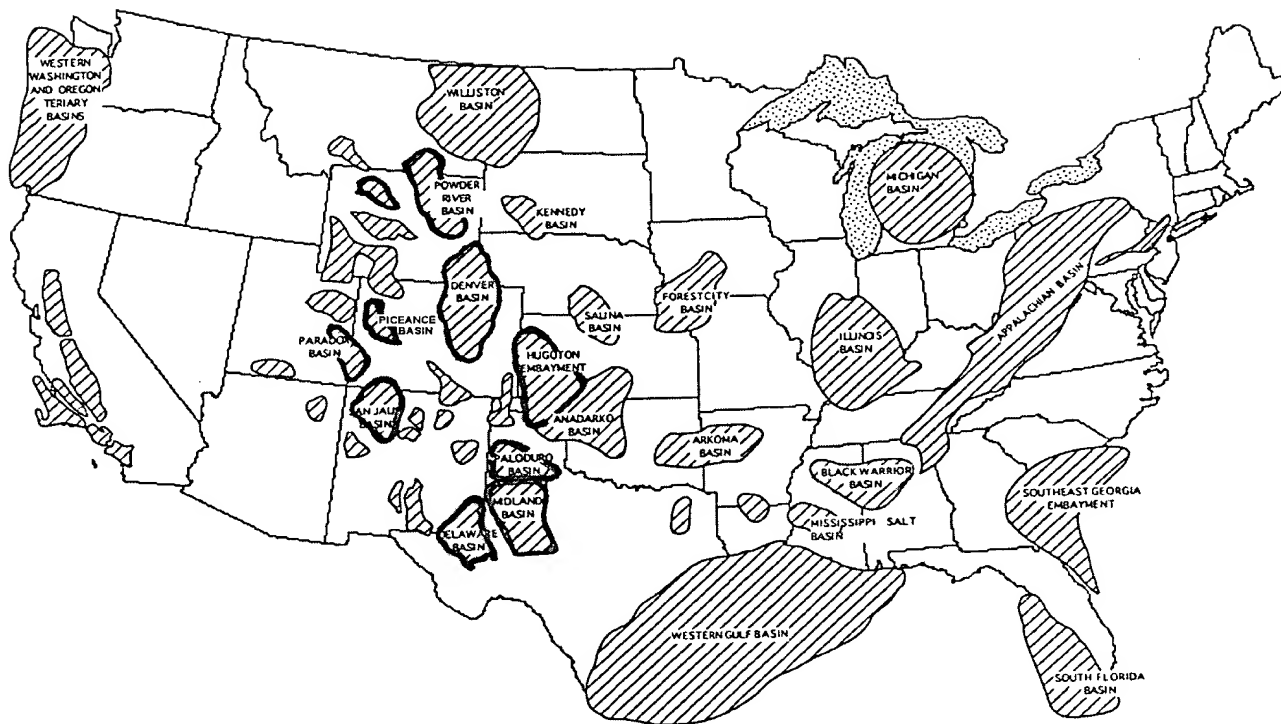


FIG. 44

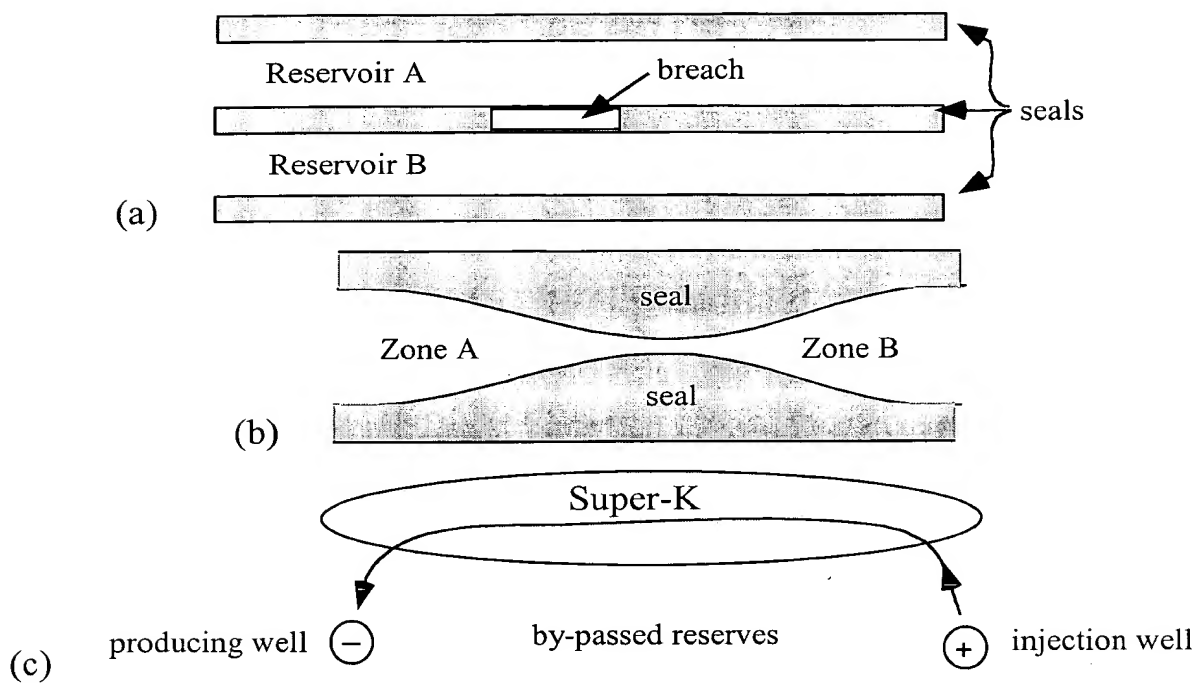


FIG. 45

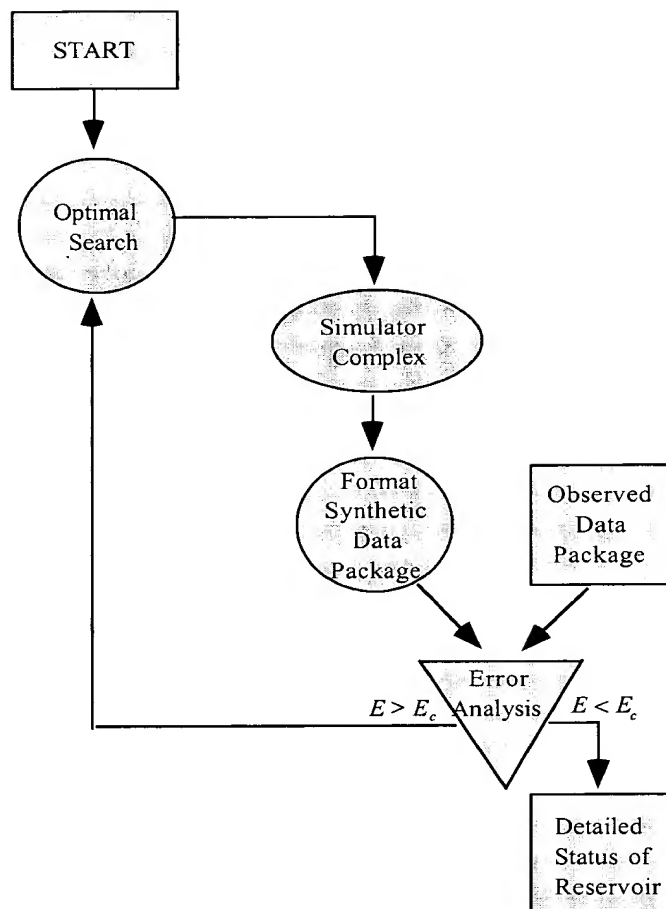


FIG. 46

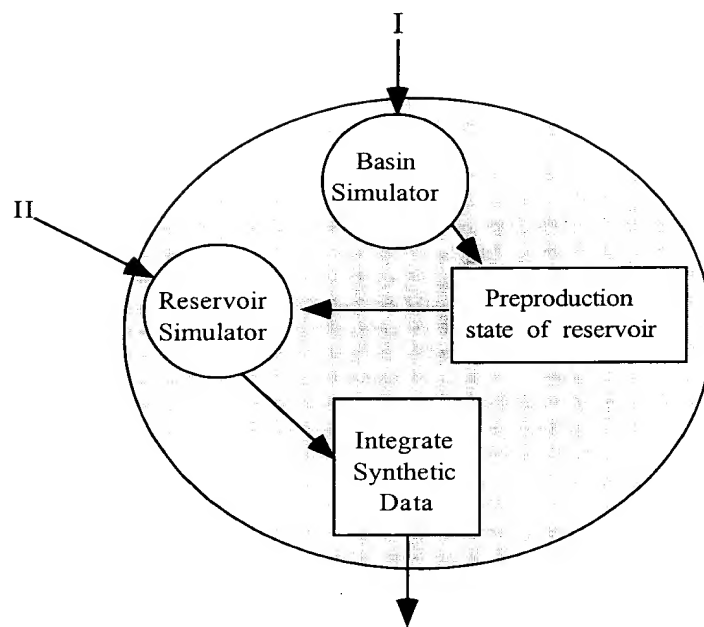
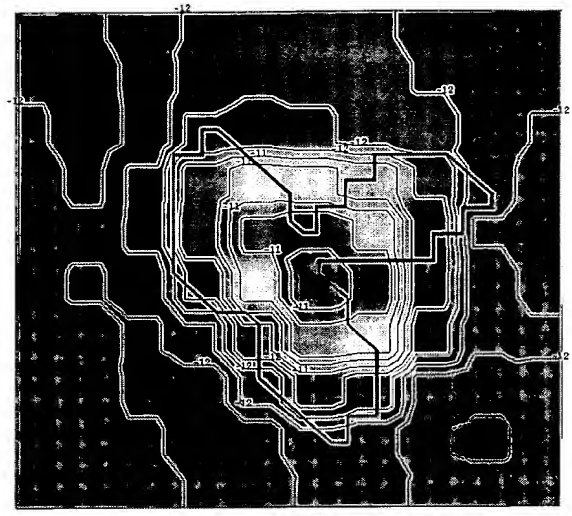
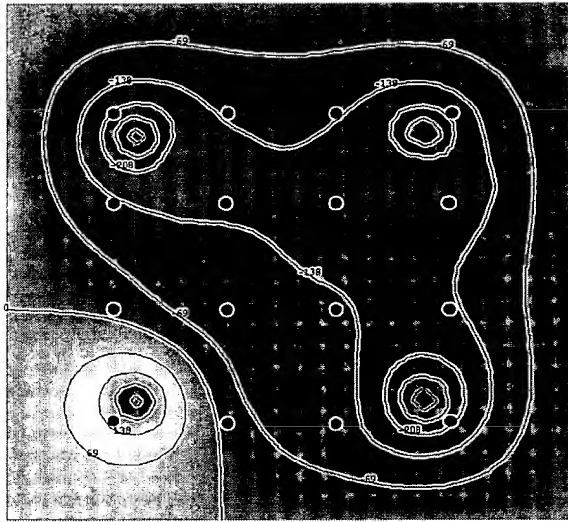


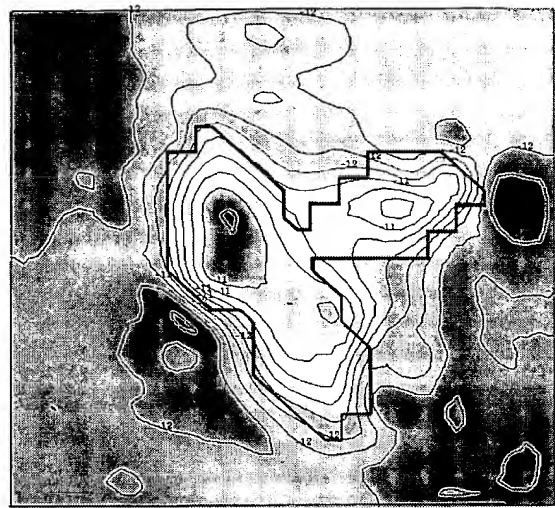
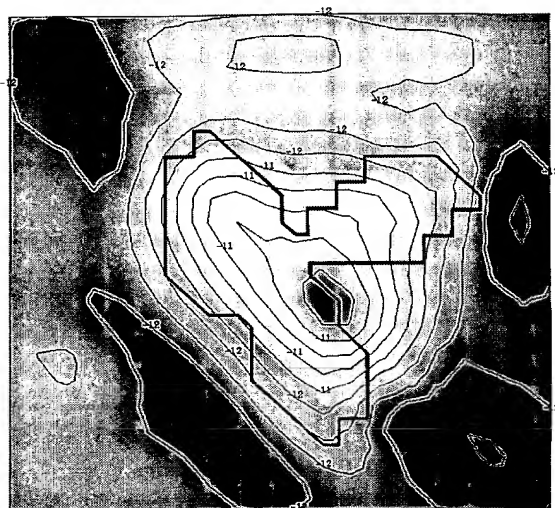
FIG. 47



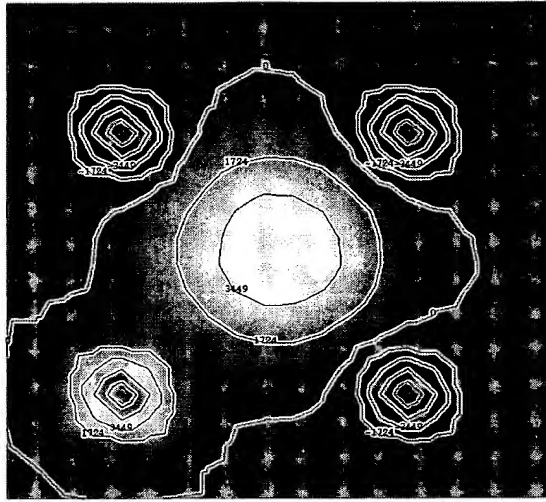
(a)

(b)

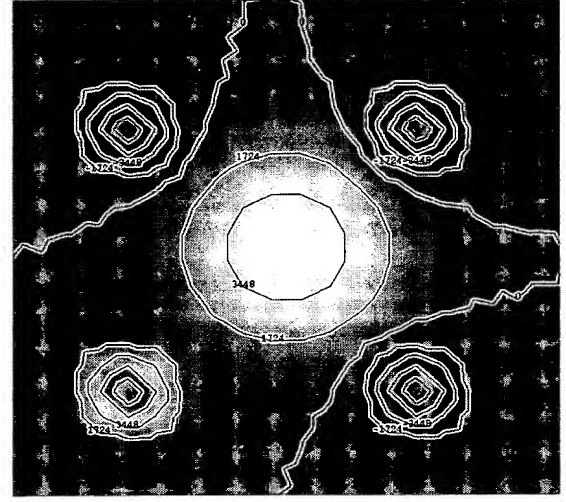
FIGs. 48a and 48b



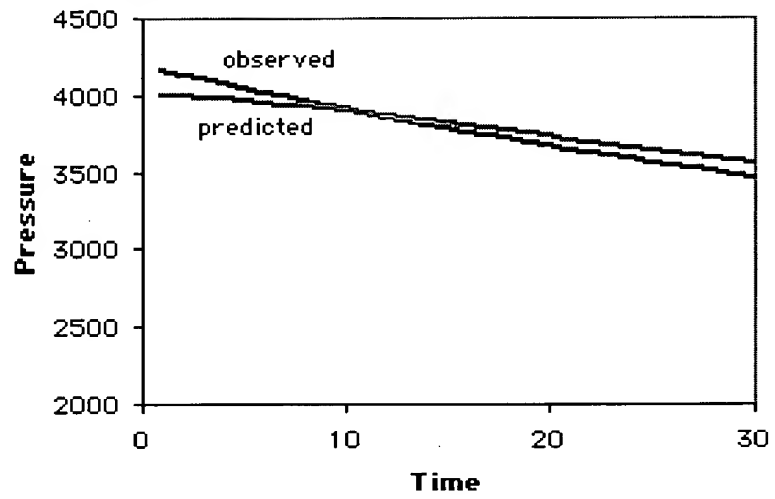
FIGs. 48c and 48d



(a)



(b)



(c)

FIG. 49

702200 6348100

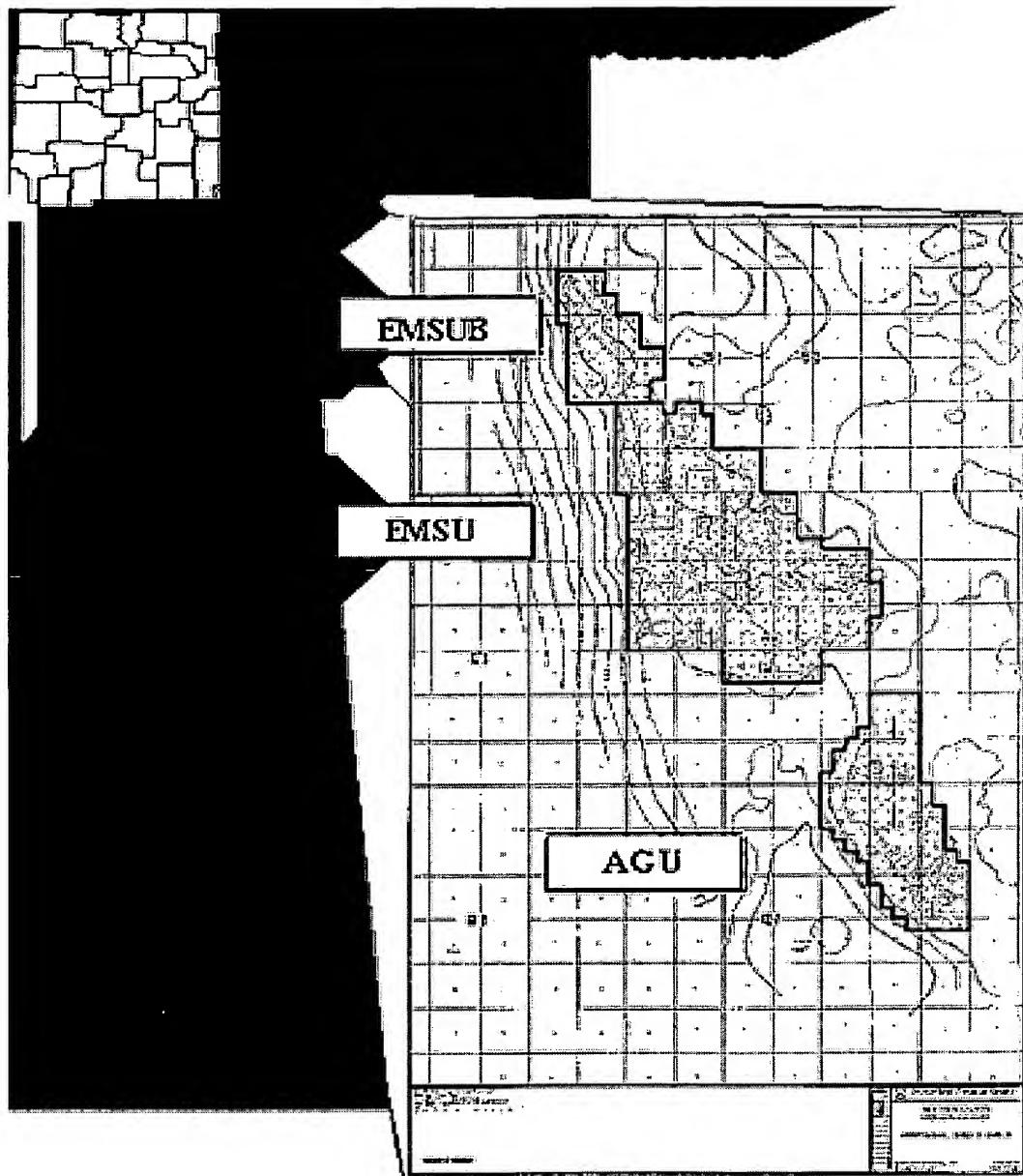


FIG. 50a

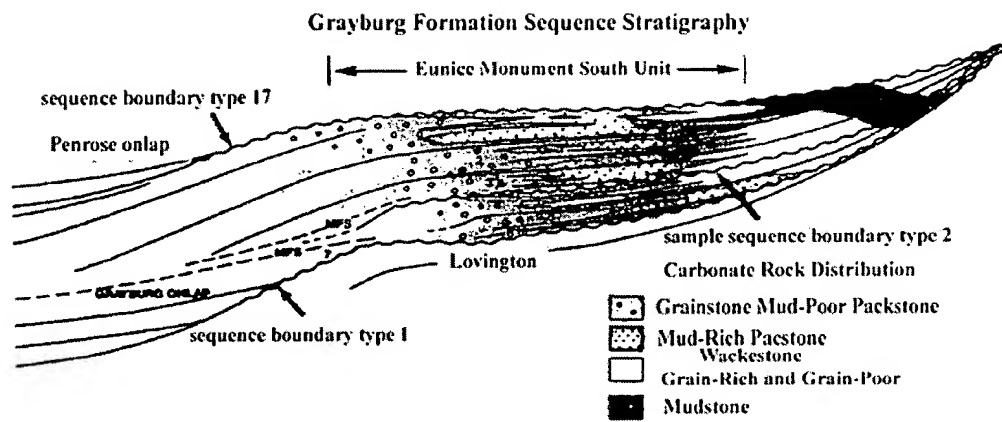


FIG. 50b

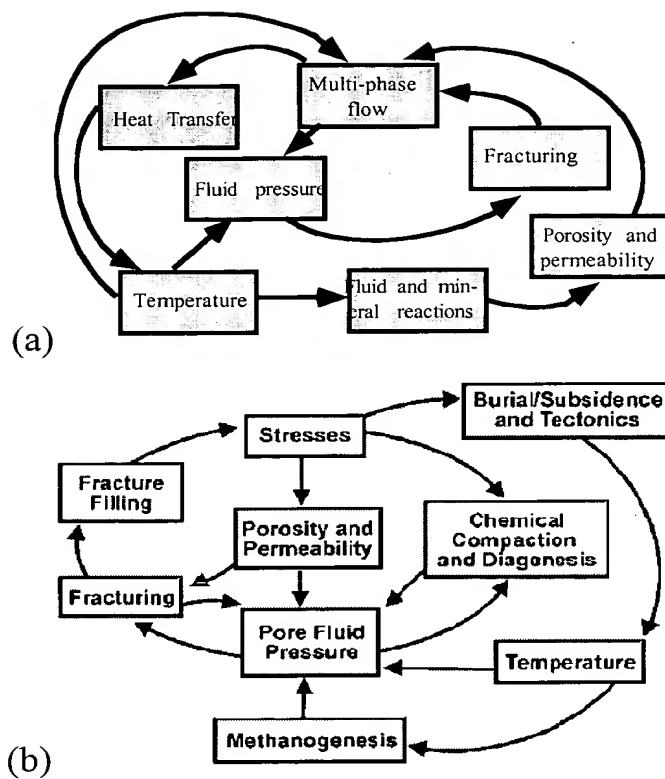


FIG. 51

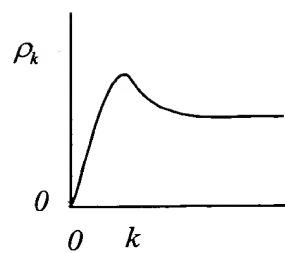


FIG. 52